

Title (en)

METHOD AND SYSTEM FOR SPECTROPHOTOMETRIC ANALYSIS OF A SAMPLE

Title (de)

VERFAHREN UND SYSTEM ZUR SPEKTROFOTOMETRISCHEN ANALYSE EINER PROBE

Title (fr)

PROCÉDÉ ET SYSTÈME D'ANALYSE SPECTROPHOTOMÉTRIQUE D'UN ÉCHANTILLON

Publication

EP 3881057 A1 20210922 (EN)

Application

EP 19821201 A 20191115

Priority

- IT 201800010364 A 20181115
- IB 2019059828 W 20191115

Abstract (en)

[origin: WO2020100100A1] Method (1) for the spectrophotometric analysis of a sample (2) of a liquid solution, in one measurement chamber (3), comprising the following steps of: B.O. supplying said at least one sample (2) of said liquid solution into said measurement chamber (3) from said duct (81) of the hydraulic circuit, with which said measurement chamber (3) is selectively in fluid communication; B. mixing said at least one sample (2) of said liquid solution with a corresponding reagent substance in said measurement chamber (3); C. generating at least one substantially monochromatic beam (4) of luminous intensity (L) and wavelength (λ_0), wherein said wavelength (λ_0) corresponds to one compound obtained by the reaction of a substance of interest to be quantified, contained in said sample (2) of said thus mixed liquid solution with said corresponding reagent substance; D. illuminating, by means of said at least one emitting device (6), said sample (2) so mixed of said liquid solution, with said at least one substantially monochromatic beam (4), through said at least one inlet opening (31) of said measurement chamber (3), along said optical path (33); E. detecting said at least one substantially monochromatic beam (4), at the end of said optical path (33); and F. processing said at least one substantially monochromatic beam (4) thus detected, to determine the concentration of the said substance to be quantified. The method comprises one step A2, preliminary to step C, for the determination of the luminous intensity (lin) of the substantially monochromatic beam (4), based on the cleaning state of the measurement chamber (3) and/or ageing of the at least one emitting device (6) and/or ageing of the at least one detecting device (5), whereby the worse is the cleaning state of the measurement chamber (3) and/or the greater is the ageing state of the at least one emitting device (6) and/or said at least one detecting device (5), the higher is the luminous intensity (lin) of the substantially monochromatic beam (4).

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 2020100100A1

Designated contracting state (EPC)

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